

Attorney Docket No. 50554-0011

**AMENDMENTS TO THE CLAIMS**

Please amend claim 36 and claim 37 as follows.

1 1. (Previously Presented) A method of managing electronic mail, the method comprising the  
2 steps of:  
3 automatically generating a set of criteria based on contents of a plurality of electronic  
4 mail messages received over a network;  
5 wherein the step of automatically generating a set of criteria includes, in response to  
6 determining that a threshold number of said plurality of electronic mail messages  
7 have a particular content, generating criteria that classifies electronic mail  
8 messages that have said particular content as a first type of electronic mail;  
9 receiving an electronic mail message over said network;  
10 determining whether said electronic mail message satisfies said set of criteria;  
11 if said electronic mail message satisfies said set of criteria, then processing said electronic  
12 mail message as said first type of electronic mail; and  
13 if said electronic mail message does not satisfy said set of criteria, then processing said  
14 electronic mail message as a second type of electronic mail;  
15 wherein said first type of electronic mail is processed differently than said second type of  
16 electronic mail.

1 2. (Original) The method of Claim 1 wherein:  
2 the method further comprises the step of generating a message signature for said  
3 electronic mail message based on contents of said electronic mail message; and  
4 the step of determining whether said electronic mail message satisfies said set of criteria  
5 includes determining whether said message signature satisfies said set of criteria.

Attorney Docket No. 50554-0011

1 3. (Previously Presented) The method of Claim 1, wherein determining that a threshold  
2 number of said plurality of electronic mail messages have a particular content includes  
3 determining that at least a portion of each of said plurality of electronic mail messages  
4 have said particular content.

1 4. (Original) The method of Claim 1 wherein the step of generating a set of criteria based on  
2 contents of a plurality of electronic mail messages received over said network includes  
3 tracking how many signature elements of said electronic mail messages match.

1 5. (Previously Presented) The method of Claim 1 wherein the step of generating a set of  
2 criteria based on contents of a plurality of electronic mail messages received over said  
3 network includes the steps of:  
4 generating message signatures for each electronic mail message of said plurality of  
5 electronic mail messages, wherein each message signature includes one or more  
6 signature elements; and  
7 counting how many of said one or more signature elements match signature elements  
8 from other message signatures.

1 6. (Original) The method of Claim 5 wherein the step of determining whether said  
2 electronic mail message satisfies said set of criteria includes determining whether a  
3 message signature generated for said electronic mail message includes at least one  
4 signature element that matches a threshold number of signature elements of previously  
5 generated message signatures.

1 7. (Original) The method of Claim 6 wherein the step of determining whether a message  
2 signature generated for said electronic mail message includes at least one signature  
3 element that matches a threshold number of signature elements, further includes

Attorney Docket No. 50554-0011

4 determining whether a message signature generated for said electronic mail message  
5 includes at least one signature element that matches a threshold number of signature  
6 elements of previously generated message signatures that are associated with a period of  
7 time.

1 8. (Original) The method of Claim 1 wherein the step of processing said electronic mail  
2 message as a first type of electronic mail includes adding a bulk electronic mail flag to  
3 said electronic mail message.

1 9. (Original) The method of Claim 8, further including the steps of:  
2 after processing said electronic mail message as a first type of electronic mail,  
3 transmitting said electronic mail message to an electronic mail server;  
4 said electronic mail server receiving said electronic mail message;  
5 said electronic mail server determining whether said electronic mail message contains  
6 said bulk electronic mail flag; and  
7 if said electronic mail message contains said bulk electronic mail flag, then processing  
8 said electronic mail message without further verifying whether said electronic  
9 mail message is bulk electronic mail.

1 10. (Previously Presented) A method of managing electronic mail, the method comprising the  
2 steps of:  
3 a central server receiving from an electronic mail server a message signature generated  
4 from an electronic mail message;  
5 an electronic mail server determining whether said message signature satisfies a set of  
6 criteria based on message signatures previously received by said central server  
7 from a set of electronic mail servers;  
8 wherein said set of criteria classifies said electronic mail message and a threshold number  
9 of electronic mail messages as having a particular content;

Attorney Docket No. 50554-0011

10 if said received data satisfies a set of criteria, then said electronic mail server processing  
11 said electronic mail message as a bulk electronic mail message.

1 11. (Original) The method of Claim 10, wherein the step of said electronic mail server  
2 determining whether said message signature satisfies a set of criteria includes  
3 determining whether a portion of said message signature matches a portion of each of a  
4 threshold number of message signatures previously received by said central server from  
5 said set of electronic mail servers.

1 12. (Original) The method of Claim 11, wherein:  
2 the step of a central server receiving from an electronic mail server a message signature  
3 includes receiving a set of one or more values generated by a one-way hash  
4 function; and  
5 the step of said electronic mail server determining whether a portion of said message  
6 signature matches includes determining whether at least one of said set of one or  
7 more values matches a threshold number of previously received values generated  
8 by a one-way hash function.

1 13. (Original) The method of Claim 12, the method further including the step of transmitting  
2 one or more messages to said electronic mail server specifying changes to one or more  
3 routines invoked by said electronic mail server to generate message signatures.

1 14. (Original) The method of Claim 13, wherein the step of transmitting one or more  
2 messages includes transmitting platform-independent byte code.

1 15. (Original) A method of managing electronic mail transmitted over a network, the method  
2 comprising the steps of:

Attorney Docket No. 50554-0011

3 a central server receiving from a set of electronic mail servers message signatures  
4 generated from electronic mail messages received by said set of electronic mail  
5 servers, wherein each message signature includes one or more signature elements;  
6 said central server generating counts of how many times said one or more signature  
7 elements are matched by signature elements from message signatures generated  
8 for other electronic mail messages; and  
9 said central server transmitting a message reflecting said counts.

1 16. (Original) The method of Claim 15, wherein:

2 the step of a central server receiving includes receiving a particular recipient signature  
3 associated with a particular message signature; and  
4 the step of generating counts includes generating counts of how many times said one or  
5 more signature elements match signature elements that are:  
6 generated for other electronic mail messages, and  
7 associated with a recipient signature that differs from said particular recipient  
8 signature.

1 17. (Original) The method of Claim 16, wherein the step of transmitting messages reflecting  
2 said counts includes transmitting said counts.

1 18. (Original) The method of Claim 16, wherein the step of transmitting messages reflecting  
2 said counts includes transmitting signature elements associated with counts greater than a  
3 threshold.

1 19. (Previously Presented) A method of managing electronic mail, the method comprising the  
2 steps of:  
3 receiving an electronic mail message over a network;  
4 generating a message signature for said electronic mail message by applying contents of  
5 said electronic mail message to a function that produces said message signature;

Attorney Docket No. 50554-0011

6 determining whether said message signature satisfies a set of criteria that indicates said  
7 electronic mail message and a threshold number of electronic mail messages have  
8 a particular content;  
9 if said message signature satisfies said set of criteria, then processing said electronic mail  
10 message as a first type of electronic mail; and  
11 if said message signature does not satisfy said set of criteria, then processing said  
12 electronic mail message as a second type of electronic mail.

1 20. (Original) The method of Claim 19, wherein the step of generating a message signature  
2 includes invoking a one-way hash function that receives content from said electronic mail  
3 message as input and generates said message signature as output.

1 21. (Original) The method of Claim 19, wherein the method further includes the step of  
2 receiving from a remote server data specifying one or more parameters used by said  
3 function for generating said message signature.

1 22. (Original) The method of Claim 19, wherein:  
2 the method further includes the step of receiving code transported from a remote server;  
3 and  
4 the step of generating a message signature includes executing said code.

1 23. (Original) The method of Claim 19, wherein:  
2 the step of generating a message signature includes invoking a first set of routines that  
3 perform said function; and  
4 the method further includes the steps of:  
5 receiving code from a remote server, and  
6 updating said first set of routines based on said code.

Attorney Docket No. 50554-0011

1 24. (Original) The method of Claim 23, wherein the step of receiving code includes receiving  
2 platform-independent byte code.

1 25. (Original) The method of Claim 23, wherein the step of receiving code includes receiving  
2 machine executable code.

1 26. (Previously Presented) A computer-readable medium carrying one or more sequences of  
2 one or more instructions for managing electronic mail, wherein the execution of the one  
3 or more sequences of the one or more instructions causes the one or more processors to  
4 perform the steps of:  
5 automatically generating a set of criteria based on contents of a plurality of electronic  
6 mail messages received over a network;  
7 wherein the step of automatically generating a set of criteria includes, in response to  
8 determining that a threshold number of said plurality of electronic mail messages  
9 have a particular content, generating criteria that classifies electronic mail  
10 messages that have said particular content as a first type of electronic mail;  
11 receiving an electronic mail message over said network;  
12 determining whether said electronic mail message satisfies said set of criteria;  
13 if said electronic mail message satisfies said set of criteria, then processing said electronic  
14 mail message as said first type of electronic mail; and  
15 if said electronic mail message does not satisfy said set of criteria, then processing said  
16 electronic mail message as a second type of electronic mail;  
17 wherein said first type of electronic mail is processed differently than said second type of  
18 electronic mail.

1 27. (Original) The computer-readable medium of Claim 26 wherein:

Attorney Docket No. 50554-0011

2 the computer-readable medium further comprises sequences of instructions for  
3 performing the step of generating a message signature for said electronic mail  
4 message based on contents of said electronic mail message; and  
5 the step of determining whether said electronic mail message satisfies said set of criteria  
6 includes determining whether said message signature satisfies said set of criteria.

1 28. (Previously Presented) The computer-readable medium of Claim 26 wherein determining  
2 that a threshold number of said plurality of electronic mail messages have a particular  
3 content includes determining that at least a portion of each of said plurality of electronic  
4 mail messages have said particular content.

1 29. (Previously Presented) A computer-readable medium carrying one or more sequences of  
2 one or more instructions for managing electronic mail, wherein the execution of the one  
3 or more sequences of the one or more instructions causes the one or more processors to  
4 perform the steps of:  
5 a central server receiving from an electronic mail server a message signature generated  
6 from an electronic mail message;  
7 an electronic mail server determining whether said message signature satisfies a set of  
8 criteria based on message signatures previously received by said central server  
9 from a set of electronic mail servers; and  
10 wherein said set of criteria classifies said electronic mail message and a threshold number  
11 of electronic mail messages as having a particular content;  
12 if said received data satisfies a set of criteria, then said electronic mail server processing  
13 said electronic mail message as a bulk electronic mail message.

1 30. (Original) The computer-readable medium of Claim 29, wherein the step of said  
2 electronic mail server determining whether said message signature satisfies a set of



Attorney Docket No. 50554-0011

3 criteria includes determining whether a portion of said message signature matches a  
4 portion of each of a threshold number of message signatures previously received by said  
5 central server from said set of electronic mail servers.

1 31. (Original) A computer-readable medium carrying one or more sequences of one or more  
2 instructions for managing electronic mail, wherein the execution of the one or more  
3 sequences of the one or more instructions causes the one or more processors to perform  
4 the steps of:  
5 a central server receiving from a set of electronic mail servers message signatures  
6 generated from electronic mail messages received by said set of electronic mail  
7 servers, wherein each message signature includes one or more signature elements;  
8 said central server generating counts of how many times said one or more signature  
9 elements are matched by signature elements from message signatures generated  
10 for other electronic mail messages; and  
11 said central server transmitting a message reflecting said counts.

1 32. (Previously Presented) A computer-readable medium carrying one or more sequences of  
2 one or more instructions for managing electronic mail, wherein the execution of the one  
3 or more sequences of the one or more instructions causes the one or more processors to  
4 perform the steps of:  
5 receiving an electronic mail message over a network;  
6 generating a message signature for said electronic mail message by applying contents of  
7 said electronic mail message to a function that produces said message signature;  
8 determining whether said message signature satisfies a set of criteria that indicates said  
9 electronic mail message and a threshold number of electronic mail messages have  
10 a particular content;  
11 if said message signature satisfies said set of criteria, then processing said electronic mail  
12 message as a first type of electronic mail; and

13 if said message signature does not satisfy said set of criteria, then processing said  
14 electronic mail message as a second type of electronic mail.

1 33. (Previously Presented) The computer-readable medium of Claim 32, wherein:  
2 the step of generating a message signature includes invoking a first set of routines that  
3 perform said function; and  
4 the computer-readable medium further includes sequences of instructions for performing  
5 the steps of:  
6 receiving code from a remote server, and  
7 updating said first set of routines based on said code.

1 34. (Original) The computer-readable medium of Claim 33, wherein the step of receiving  
2 code includes receiving platform-independent byte code.

1 35. (Previously Presented) A method of managing electronic mail, the method comprising the  
2 steps of:  
3 automatically generating a set of criteria based on contents of a plurality of electronic  
4 mail messages received over a network;  
5 wherein the step of automatically generating a set of criteria includes  
6 automatically determining what particular content to use to classify electronic  
7 mail messages by performing steps that include determining that a threshold  
8 number of said plurality of electronic mail messages have a particular content;  
9 in response to determining that a threshold number of said plurality of electronic mail  
10 messages have said particular content, generating criteria that classifies electronic  
11 mail messages that have said particular content as a first type of electronic mail;  
12 receiving an electronic mail message over said network;  
13 determining whether said electronic mail message satisfies said set of criteria;

Attorney Docket No. 50554-0011

14 if said electronic mail message satisfies said set of criteria, then processing said electronic  
15 mail message as said first type of electronic mail; and  
16 if said electronic mail message does not satisfy said set of criteria, then processing said  
17 electronic mail message as a second type of electronic mail;  
18 wherein said first type of electronic mail is processed differently than said second type of  
19 electronic mail.

1 36. (Currently Amended) A computer-readable medium carrying one or more sequences of  
2 instructions which, when executed by one or more processors, causes the one or more  
3 processors to perform the method recited in Claim ~~[[34]]~~ 35.

1 37. (New) The method of claim 35, wherein at least one message of said plurality of  
2 messages has not been classified, before determining that a threshold number of said  
3 plurality of electronic mail messages have a particular content, as belonging to said first  
4 type.